CLAIMS:

1. A circuit arrangement for obtaining an output signal (Va) from a signal (Vs) containing at least one alternating component, said circuit arrangement comprising a signal source (1) that supplies this signal (Vs), a first peak value detection device (2) for determining a maximum value (Vmax) of the signal (Vs), a second peak value detection device (3) for determining a minimum value (Vmin) of the signal (Vs), a first signal linking device (4, 5, 6, 71) for obtaining a first resulting signal (V1) by additive linking of the signal (Vs), the maximum value (Vmax) and the minimum value (Vmin) in accordance with the rule

$$V1 = K1*\{Vs - (Vmax + Vmin)/2\},$$

in which K1 is a freely selectable first constant factor,

a second signal linking device (7, 72) for obtaining a second resulting signal (V2) by additive linking of the maximum value (Vmax) and minimum value (Vmin) in accordance with the rule

$$V2 = (Vmax - Vmin)*K2,$$

in which K2 is a freely selectable second constant factor,

a first squaring device (8) for squaring the first resulting signal (V1), a second squaring device (9) for squaring the second resulting signal (V2) and a third signal linking device (100, 11, 101) for obtaining the output signal (Va) by additive linking of the squared first resulting signal ($(V1)^2$) and the squared second resulting signal ($(V2)^2$) in accordance with the rule

$$Va = K3*\{(1/8)*(K1/K2)^2*(V2)^2 - (V1)^2\},$$

in which K3 is a freely selectable third constant factor.

2. A circuit arrangement as claimed in claim 1, characterized in that the signal source (1) is formed by a sensor device.

3. A circuit arrangement as claimed in claim 2, characterized in that the sensor device (1) is designed as a magnetoresistive sensor device.

4. A rotational speed measurement device, characterized by a circuit arrangement as claimed in claim 1, 2 or 3.

5. A method of obtaining an output signal (Va) from a signal (Vs) containing at least one alternating component, said method comprising the following method steps:

- determining a maximum value (Vmax) of the signal (Vs),
- determining a minimum value (Vmin) of the signal (Vs),
- obtaining a first resulting signal (V1) by additive linking of the signal (Vs), the maximum value (Vmax) and the minimum value (Vmin) in accordance with the rule

$$V1 = K1*\{Vs - (Vmax + Vmin)/2\},$$

in which K1 is a freely selectable first constant factor,

- obtaining a second resulting signal (V2) by additive linking of the maximum value (Vmax) and minimum value (Vmin) in accordance with the rule

$$V2 = (Vmax - Vmin)*K2,$$

in which K2 is a freely selectable second constant factor,

- squaring the first resulting signal (V1),
- squaring the second resulting signal (V2) and
- obtaining the output signal (Va) by additive linking of the squared first resulting signal ($(V1)^2$) and the squared second resulting signal ($(V2)^2$) in accordance with the rule

$$Va = K3*\{(1/8)*(K1/K2)^2*(V2)^2 - (V1)^2\},$$

in which K3 is a freely selectable third constant factor.